

SHARP®

LC-15SH1M LC-15SH1X LC-20SH1M LC-20SH1X

ENGLISH

中文 (繁體)

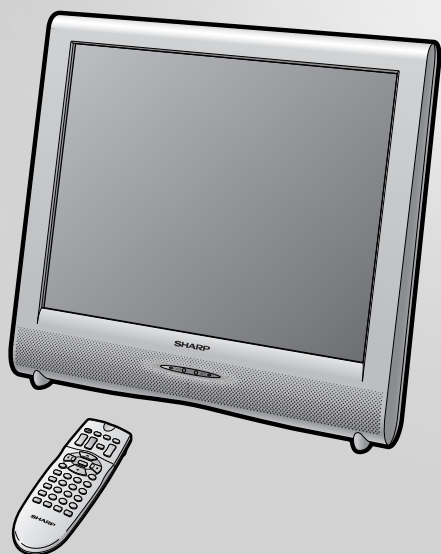
中文 (簡體)

LCD COLOUR TELEVISION

液晶顯示彩色電視機
液晶显示彩色电视机

OPERATION MANUAL

使用說明書
使用说明书



Printed on 100% post-consumer recycled paper.

本說明用紙使用的是100%的再生紙。

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LCD COLOUR TELEVISION ENGLISH

OPERATION MANUAL

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Dear SHARP Customer

Thank you for your purchase of the SHARP LCD colour TV product. To ensure safety and many years of trouble-free operation of your product, please read the Important Safety Precautions carefully before using this product.

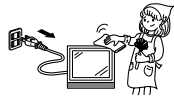
Important Safety Precautions

Electricity is used to perform many useful functions, but it can also cause personal injuries and property damage if improperly handled. This product has been engineered and manufactured with the highest priority on safety. However, improper use can result in electric shock and/or fire. In order to prevent potential danger, please observe the following instructions when installing, operating and cleaning the product. To ensure your safety and prolong the service life of your LCD colour TV product, please read the following precautions carefully before using the product.

1. Read instructions—All operating instructions must be read and understood before the product is operated.
2. Keep this manual in a safe place—These safety and operating instructions must be kept in a safe place for future reference.
3. Observe warnings—All warnings on the product and in the instructions must be observed closely.
4. Follow instructions—All operating instructions must be followed.
5. Attachments—Do not use attachments not recommended by the manufacturer. Use of inadequate attachments can result in accidents.
6. Power source—This product must operate on a power source specified on the specification label. If you are not sure of the type of power supply used in your home, consult your dealer or local power company.
7. AC cord protection—The AC cords must be routed properly to prevent people from stepping on them or objects from resting on them. Check the cords at the plugs and product.
8. Overloading—Do not overload AC outlets or extension cords. Overloading can cause fire or electric shock.
9. Entering of objects and liquids—Never insert an object into the product through vents or openings. High voltage flows in the product, and inserting an object can cause electric shock and/or short internal parts. For the same reason, do not spill water or liquid on the product.
10. Servicing—Do not attempt to service the product yourself. Removing covers can expose you to high voltage and other dangerous conditions. Request a qualified service person to perform servicing.
11. Repair—If any of the following conditions occurs, unplug the AC cord from the AC outlet, and request a qualified service person to perform repairs.
 - a. When the AC cord or plug is damaged.
 - b. When a liquid was spilled on the product or when objects have fallen into the product.
 - c. When the product has been exposed to rain or water.
 - d. When the product does not operate properly as described in the operating instructions.
Do not touch the controls other than those described in the operating instructions. Improper adjustment of controls not described in the instructions can cause damage, which often requires extensive adjustment work by a qualified technician.
 - e. When the product has been dropped or damaged.
 - f. When the product displays an abnormal condition. Any noticeable abnormality in the product indicates that the product needs servicing.
12. Replacement parts—In case the product needs replacement parts, make sure that the service person uses replacement parts specified by the manufacturer, or those with the same characteristics and performance as the original parts. Use of unauthorised parts can result in fire, electric shock and/or other danger.
13. Safety checks—Upon completion of service or repair work, request the service technician to perform safety checks to ensure that the product is in proper operating condition.
14. Wall or ceiling mounting—When mounting the product on a wall or ceiling, be sure to install the product according to the method recommended by the manufacturer.

Important Safety Precautions (Continued)

- **Cleaning**—Unplug the AC cord from the AC outlet before cleaning the product. Use a damp cloth to clean the product. Do not use liquid cleaners or aerosol cleaners.



- **Water and moisture**—Do not use the product near water, such as bathtub, washbasin, kitchen sink, laundry tub, swimming pool and in a wet basement.



- **Stand**—Do not place the product on an unstable cart, stand, tripod or table. Doing so can cause the product to fall, resulting in serious personal injuries as well as damage to the product. Use only a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the product. When mounting the product on a wall, be sure to follow the manufacturer's instructions. Use only the mounting hardware recommended by the manufacturer.



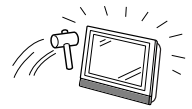
- When relocating the product placed on a cart, it must be moved with utmost care. Sudden stops, excessive force and uneven floor surface can cause the product to fall from the cart.



- **Ventilation**—The vents and other openings in the cabinet are designed for ventilation. Do not cover or block these vents and openings since insufficient ventilation can cause overheating and/or shorten the life of the product. Do not place the product on a bed, sofa, rug or other similar surface, since they can block ventilation openings. This product is not designed for built-in installation; do not place the product in an enclosed place such as a bookcase or rack, unless proper ventilation is provided or the manufacturer's instructions are followed.



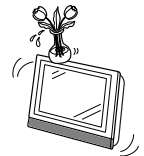
- The LCD panel used in this product is made of glass. Therefore, it can break when the product is dropped or applied with impact. Be careful not to be injured by broken glass pieces in case the LCD panel breaks.



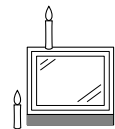
- **Heat sources**—Keep the product away from heat sources such as radiators, heaters, stoves and other heat-generating products (including amplifiers).



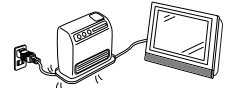
- Do not place vases or any other water-filled containers on this product. The water may spill onto the product causing fire or electric shock.



- To prevent fire, never place any type of candle or naked flames on the top or near the TV set.



- To prevent fire or shock hazard, do not place the AC power cord under the TV set or other heavy items.



The LCD panel is a very high technology product with 921,600 thin film transistors, giving you fine picture details.

Due to the very large number of pixels, a few non-active pixels may occasionally appear on the screen as a fixed point of blue, green or red.


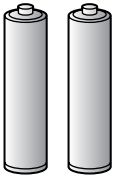
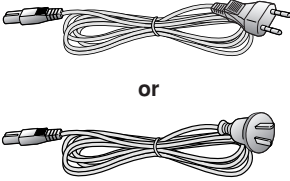

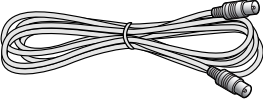
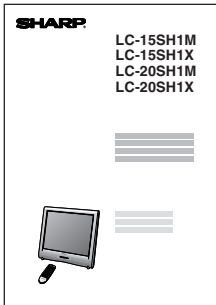
This is within product specifications and does not constitute a fault.

Do not display a still picture for a long time, as this could cause an afterimage to remain.

Install the product on the place where the AC cord can be unplugged easily from the AC outlet, or from the AC INPUT terminal on the rear of the product.

Supplied Accessories

Make sure the following accessories are provided with the LCD TV set.

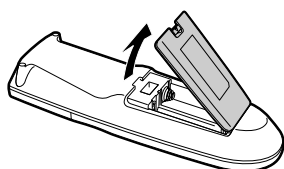
Wireless remote control	"AA" size batteries (x2)	AC cord	Antenna cable	Operation manual
		 or 		
pages 4 and 9	page 4	* Product shape may vary from country to country. page 5	* The LC-15SH1X and LC-20SH1X models only. page 5	

Preparation

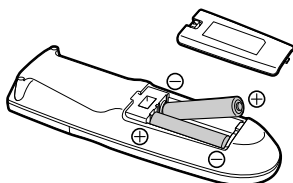
Installing Batteries in the Remote Control

Before using the LCD TV set for the first time, install the two "AA" size batteries (supplied) in the remote control. When the batteries become depleted and the remote control fails to operate, replace the batteries with new "AA" size batteries.

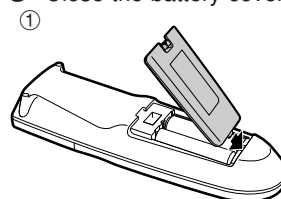
- 1 Open the battery cover.
- 2 Insert two "AA" size batteries.
- 3 Close the battery cover.



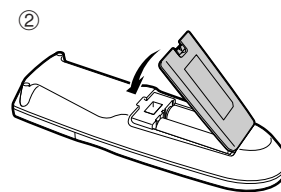
- Detach the cover while pressing the (▼) part.



- Place batteries with their terminals corresponding to the (+) and (–) indications in the battery compartment.



- Align the tab on the battery cover (①) and place it while pressing the tab (②) to close it.



⚠ Caution!

Precautions regarding batteries

Improper use of batteries can result in a leakage of chemicals and/or explosion. Be sure to follow the instructions below.

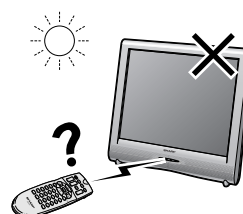
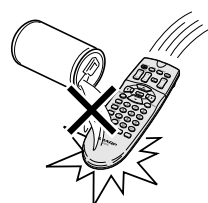
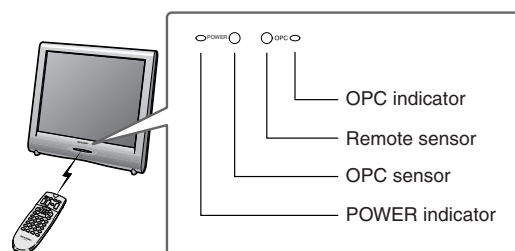
- Place batteries with their terminals corresponding to the (+) and (–) indications.
- Different types of batteries have different characteristics. Do not mix batteries of different types.
- Do not mix old and new batteries. Mixing old and new batteries can shorten the life of new batteries and/or cause old batteries to leak chemicals.
- Remove batteries as soon as they are depleted. Chemicals that leak from batteries can cause a rash. If chemical leakage is found, wipe it off with a cloth.
- The batteries supplied with the LCD TV set may have a shorter operating time due to storage conditions.
- If the remote control is not to be used for an extended period of time, remove the batteries from the remote control.

Using the Remote Control

Use the remote control by pointing it towards the remote sensor window of the main unit. Objects between the remote control and sensor window may prevent proper operation.

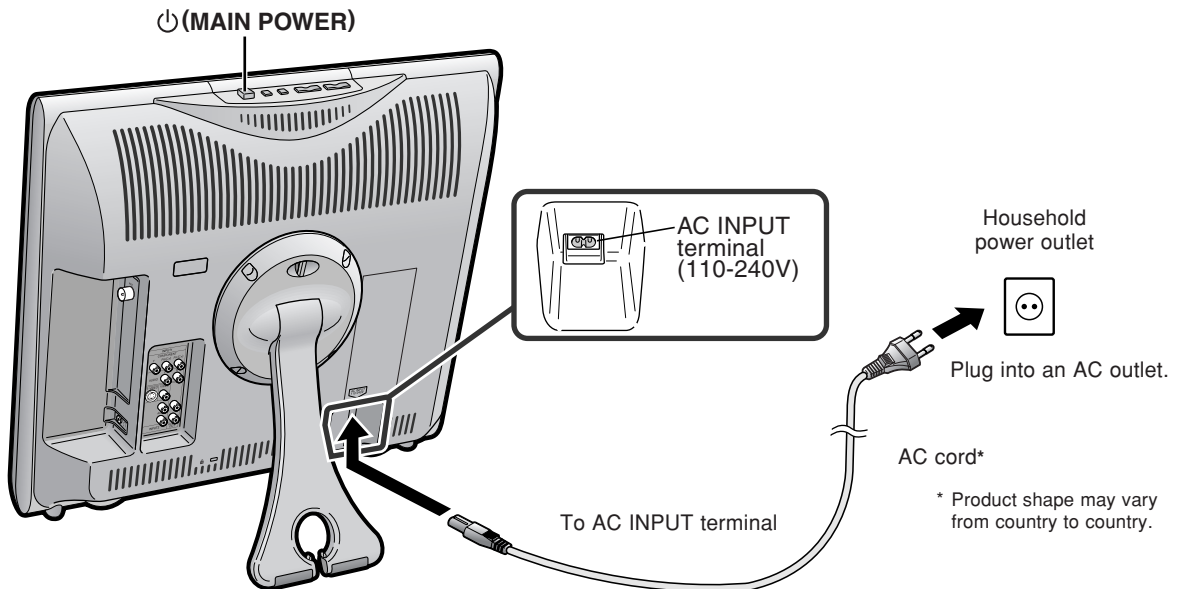
Cautions regarding use of the remote control

- Do not apply shock to the remote control. In addition, do not expose the remote control to liquids, and do not place it in an area with high humidity.
- Do not install or place the remote control under direct sunlight. The heat may cause deformation of the unit.
- The remote control may not work properly if the remote sensor window is under direct sunlight or strong lighting. In such a case, change the angle of the lighting or main unit, or operate the remote control closer to the remote sensor window.



Power Connection

Connect to the AC input terminal of the LCD TV set using the AC cord (supplied).



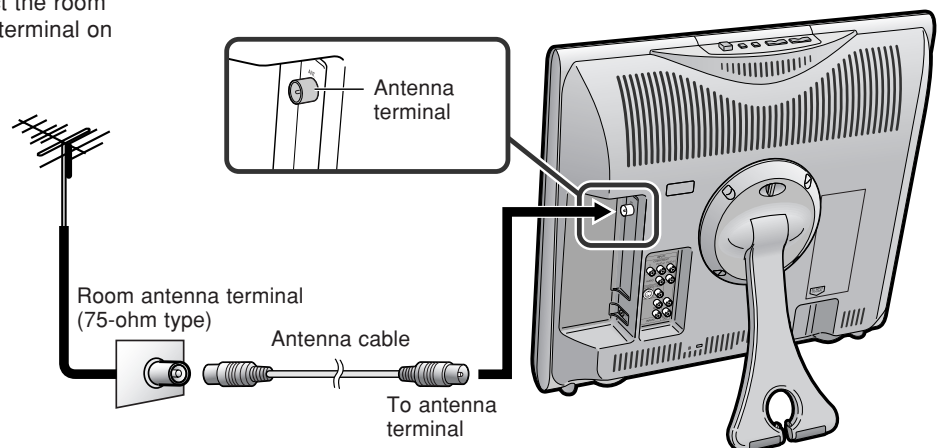
NOTE

- Unplug the AC cord from the LCD TV set and power outlet when the LCD TV set is not to be used for a long period of time.

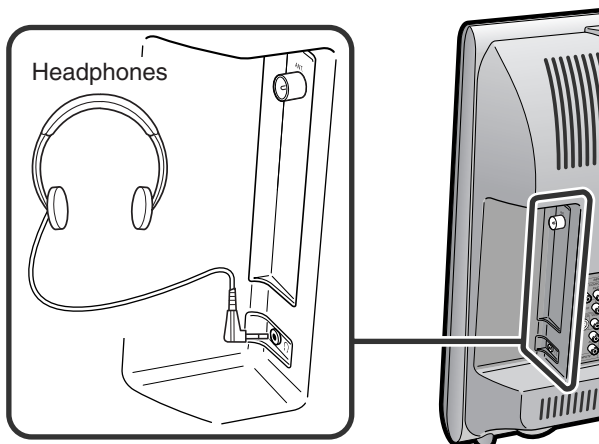
Antenna Connection

■ Using a TV antenna cable

- Using the antenna cable, connect the room antenna terminal to the antenna terminal on the LCD TV set. (Refer to the figure on the right.)



Listening with Headphones



Plug the headphone mini-plug into the headphone jack located on the side of the LCD TV set.
Adjust the sound volume using **VOL (+)/(-)** on the remote control.

On-screen display

TV VOLUME
10 [Progress bar showing volume level]

NOTE

- Headphones are not included in the supplied accessories.
- No sound is heard from the main unit speakers when the headphone mini-plug is connected into the headphone jack.
- Do not set the volume at a high level. Hearing experts advise against extended listening at high volume levels.

Preparation (Continued)

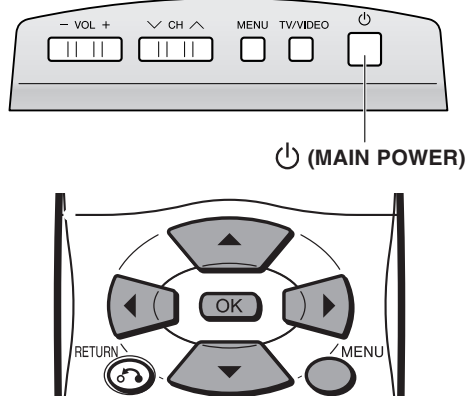
First Installation

When you turn on the LCD TV set for the first time, the First Installation routine, which makes installation easier, is activated. Using this routine, you can select the on-screen display language, and automatically search for and store all the receivable TV channels.

NOTE

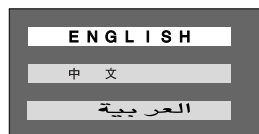
- You can also execute the First Installation routine by selecting "FIRST INSTALLATION" on the SETUP Menu screen.
For selecting the menu items, see pages 13 and 14.

Upper control panel of the main unit



- 1 Press **⏻ (MAIN POWER)** on the LCD TV set.
 - The "FIRST INSTALLATION" screen with a list of the languages for the on-screen display is displayed.

- 2 Press **▲/▼** to select the desired language, and press **OK**.



- 3 Press **OK** to execute the automatic programme search.



- 4 After "SEARCH IS COMPLETED" is displayed, press **MENU** to exit.

NOTE

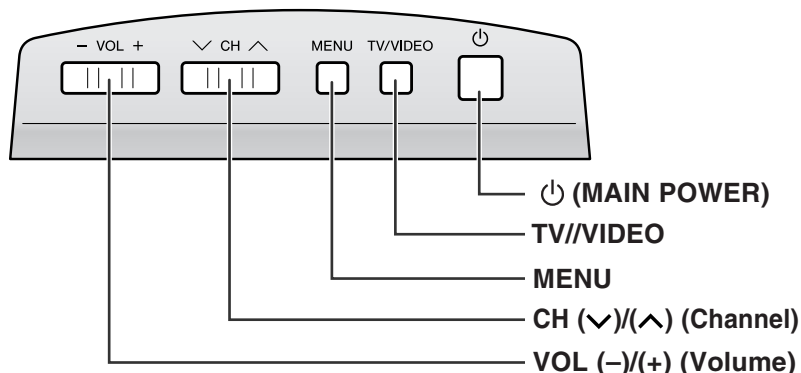
- After the First installation routine, you can change the settings of "LANGUAGE" (page 17), and perform the automatic search (page 12) again.

Part Names of the Main Unit

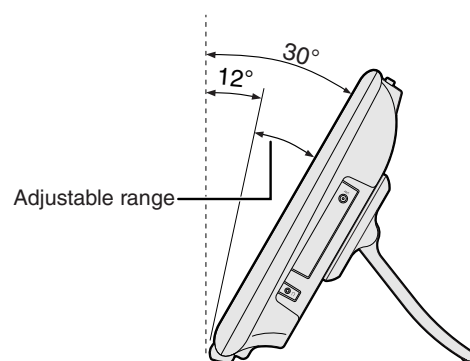
The examples used throughout this manual are based on the LC-20SH1M model.

Controls

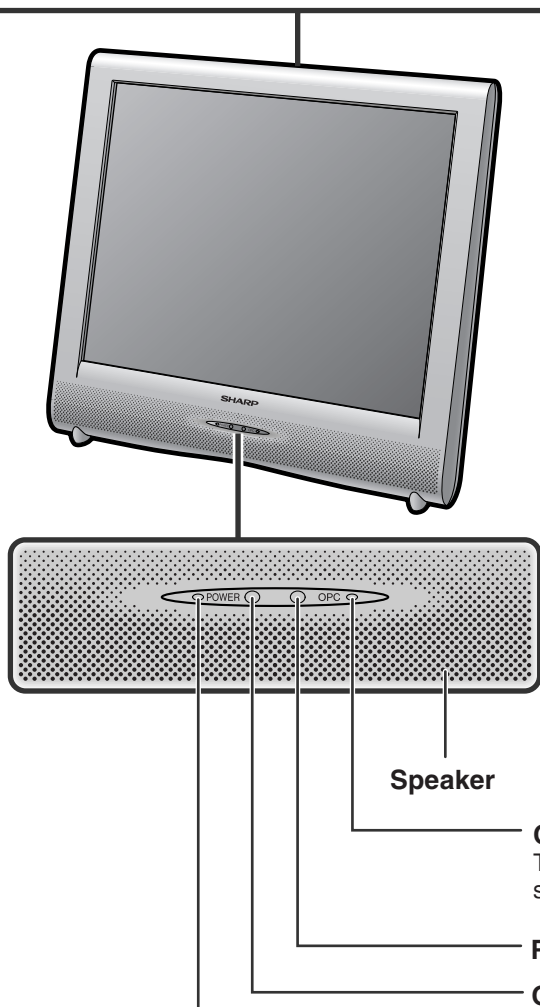
Upper control panel



How to adjust the angle



The screen angle can be tilted backwards between 12 and 30 degrees. (It cannot be set to vertical.) When changing the angle, make sure to hold the stand and adjust the screen to the best viewable angle.



POWER indicator

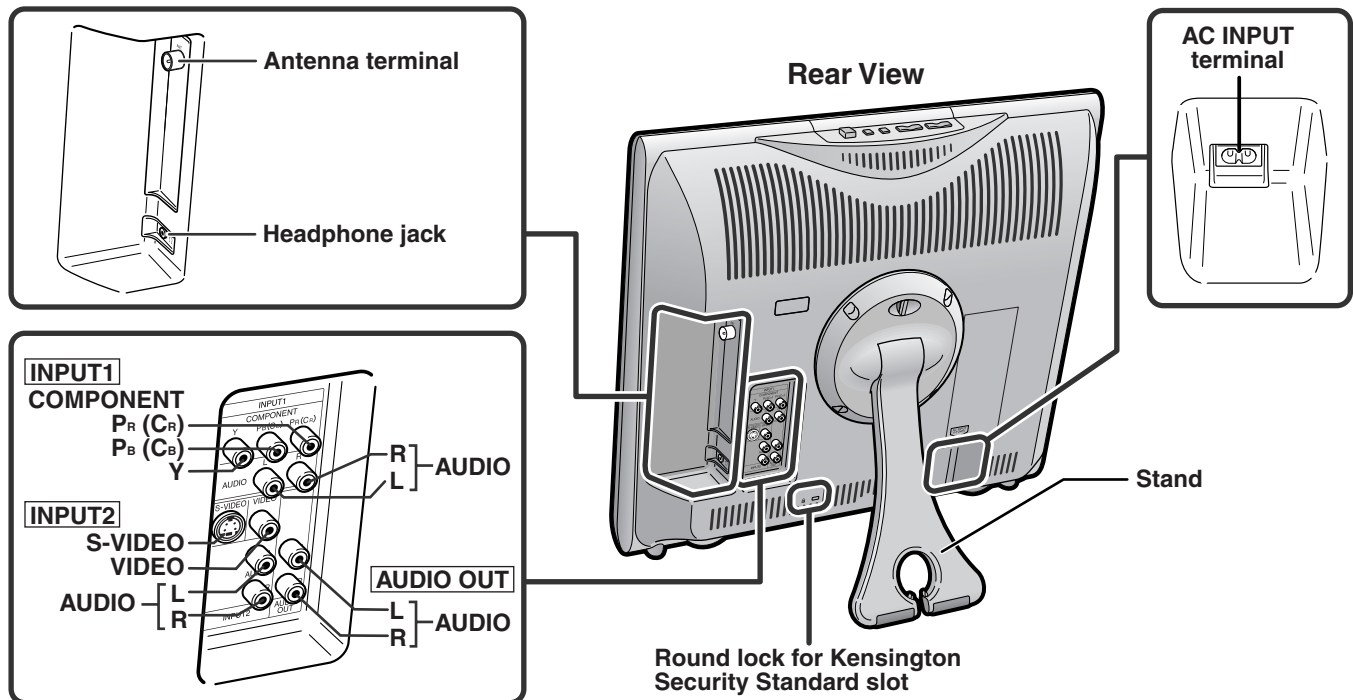
POWER indicator lights up green when the power is on, and red when in the standby mode (the indicator will not light when the main power is off).

NOTE

- TV/VIDEO, CH (∇)/(∧) (Channel), VOL (-)/(+) (Volume) and MENU on the upper control panel of the main unit have the same functions as the same buttons on the remote control (see page 13). Fundamentally, this operation manual provides a description based on operation using the remote control.

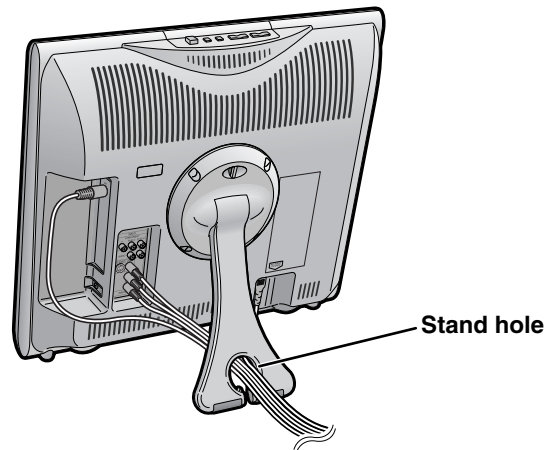
Part Names of the Main Unit (Continued)

Terminals



How to Fix the Cables

Pull the cables connected to each terminal.
Insert the cables into the stand hole and fix the cables.

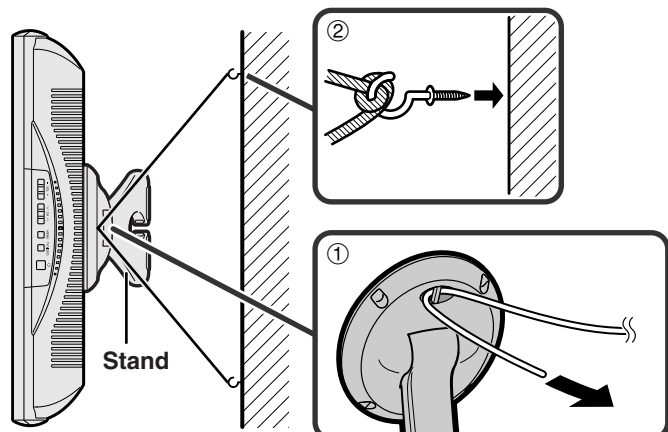


How to Prevent the LCD TV Set from Falling Over

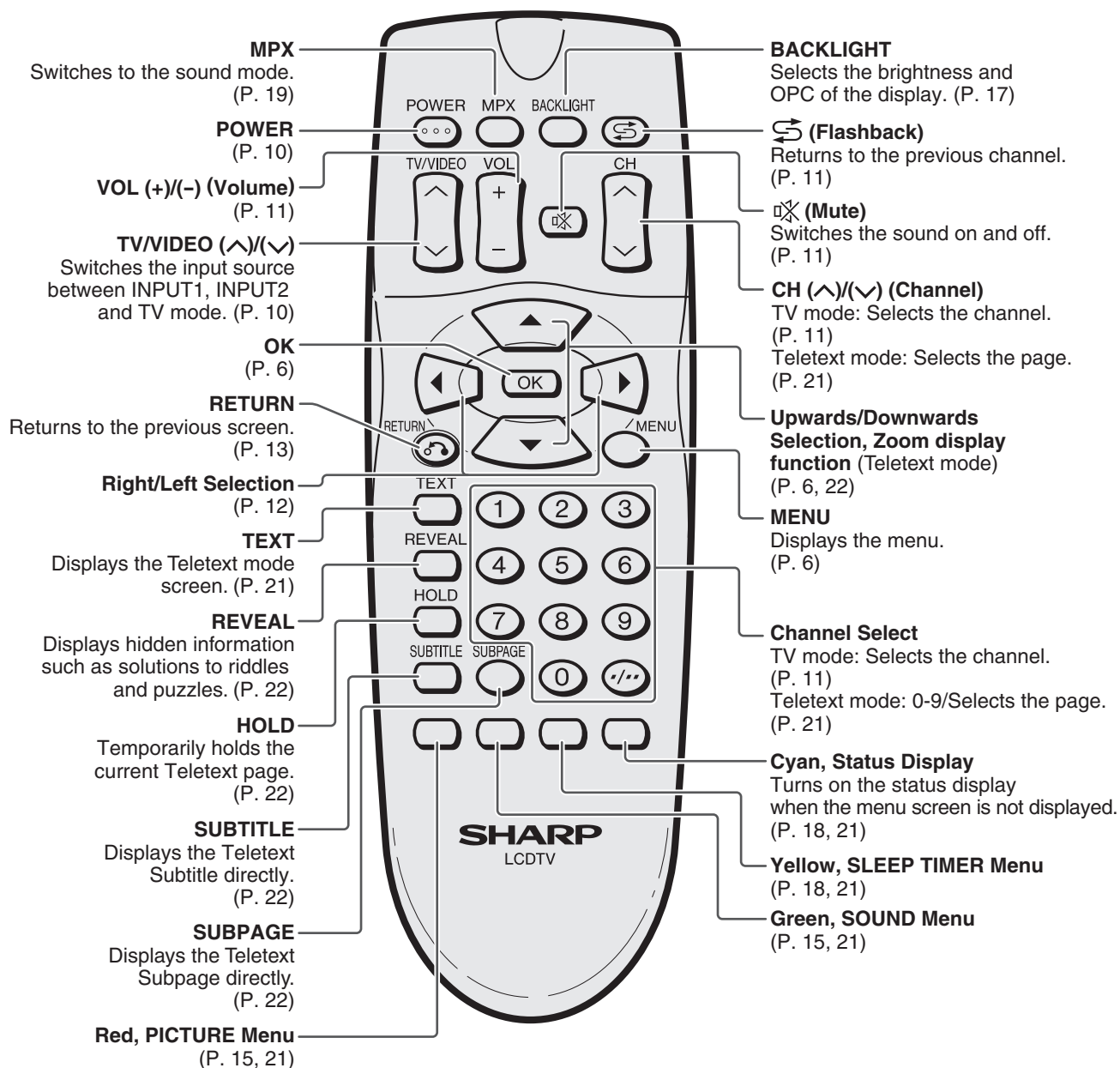
To prevent the LCD TV set from falling over in case of earthquakes and so on, strap it onto the wall by threading one end of the string through the loop of the stand (①) and fastening the LCD TV set with the string attached to the hook on the wall or the post, etc. (②).

(An example of strapping the LCD TV set onto the wall is shown on the right.)

- The string and hook are commercially available.

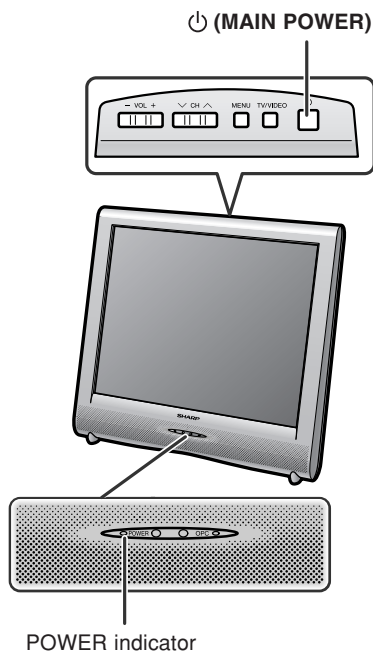


Part Names of the Remote Control



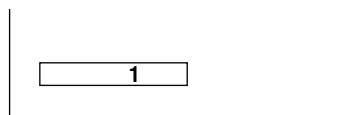
Basic Operation

Turning On and Off the Main Power



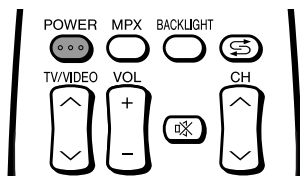
- Press **MAIN POWER**.
 - The POWER indicator instantly changes from red to green and the LCD TV set is turned on.
 - The on-screen display appears for a few seconds after turning on the main power.

On-screen display



- To turn off the main power, press **MAIN POWER** again.

STANDBY/ON



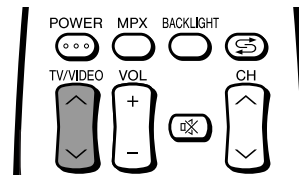
To turn off the LCD TV

- Press **POWER** of the remote control.
- The POWER indicator will turn red.

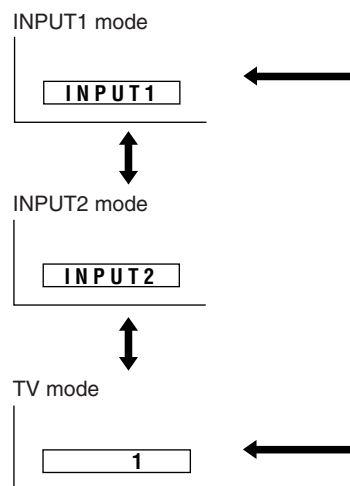
To turn the LCD TV back on

- Press **POWER** of the remote control again.
- The POWER indicator will turn green.

Switching the Input Mode (INPUT1/INPUT2/TV)



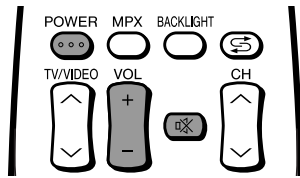
- 1 Turn on the power of the connected device.
- 2 Press **TV/VIDEO** (^)/(v) to select the applicable input source.
 - The screen changes in order of INPUT1, INPUT2 and TV mode each time **TV/VIDEO** (^)/(v) is pressed.



NOTE

- INPUT1: Select this mode when viewing the signals from the video equipment connected to the INPUT1 (COMPONENT) terminals.
- INPUT2: Select this mode when viewing the signals from the video equipment connected to the INPUT2 terminals using the VIDEO or S-VIDEO terminal for video input. If both terminals are connected with cables, the S-VIDEO input terminal is selected as the high priority.

Sound Volume



To adjust the volume

- Press **VOL (+)** to increase the sound volume.
 - The bar indicator shifts right.



- Press **VOL (-)** to decrease the sound volume.
 - The bar indicator shifts left.



To mute the sound

- Press **Mute** to temporarily turn off the sound.
 - "SOUND OFF" is displayed.



- Press **Mute** again to turn off the Mute function.
 - "SOUND ON" is displayed.

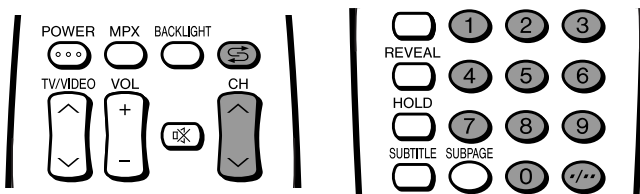


NOTE

- When **VOL (+)/(-)** is pressed in the Mute mode, the sound turns on, and the volume indicator is displayed.
- The Mute function is cancelled when **POWER** is pressed.

Changing Channels

You can select channels using **Channel Select** or **CH (▲)/(▼) (Channel)**.



NOTE

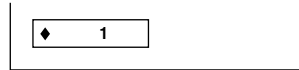
- To handle the increasing number of channels available, this LCD TV set allows you to select up to 200 channels (0 to 199).

■ Using CH (▲)/(▼) (Channel)

- Press **CH (▲)** to change the channels in the following order:
1 → 2 → 3 → ... → 198 → 199 → 0 → 1 → 2 → 3 → ...
- Press **CH (▼)** to change the channels in the following order:
3 → 2 → 1 → 0 → 199 → 198 → ... → 3 → 2 → 1 → ...

NOTE

- Channel "0" is reserved for RF output of VCR.
- Channels not set with "FIRST INSTALLATION" or "CH SETUP" are set to be skipped and therefore cannot be displayed using **CH (▲)/(▼) (Channel)**.

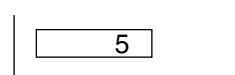


■ Using Channel Select

When selecting the channel using **Channel Select**, finish inputting the channel number by holding down the button for the last digit for a moment.

To select a one-digit channel (e.g., Channel 5):

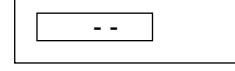
- 1 Hold down the **5** button.



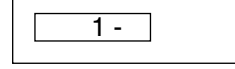
- If "5-" is indicated and the picture does not change, press the **Mute** button to switch over to the 1-digit select mode and hold down the **5** button again.

To select a two-digit channel (e.g., Channel 15):

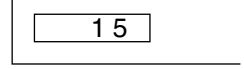
- 1 Press the **Mute** button to set the 2-digit select mode.



- 2 Press the **1** button.

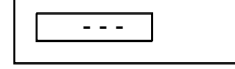


- 3 Hold down the **5** button.

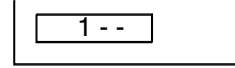


To select a 3-digit channel number (e.g., Channel 150):

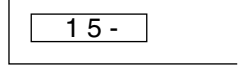
- 1 Press the **Mute** button to set the 3-digit select mode.



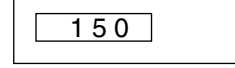
- 2 Press the **1** button.



- 3 Press the **5** button.



- 4 Hold down the **0** button.



NOTE

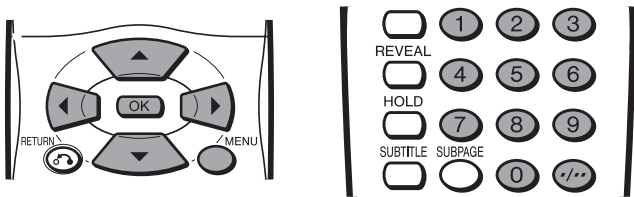
- Complete this procedure within 4 seconds, otherwise the selection will not be made.
- For a 3-digit channel number, only "0" or "1" can be input for the first digit.

■ Using **Flashback**

- Press **Flashback** to switch the currently tuned channel to the previously tuned channel.
- Press **Flashback** again to switch back to the currently tuned channel.

Basic Operation (Continued)

Channel Setting (AUTO)



- 1 Press **MENU** to display the Menu screen.
- 2 Press **◀▶** to select “SETUP”.
- 3 Press **▲▼** to select “CH SETUP”, and press **OK**.
- 4 Press **▲▼** to select “AUTO”, and press **OK**.



- 5 Press **OK** to begin the automatic programme search.
-
- When the automatic programme search is completed, the channel first received will be displayed.
 - 6 After “SEARCH IS COMPLETED” is displayed, press **MENU** to exit.

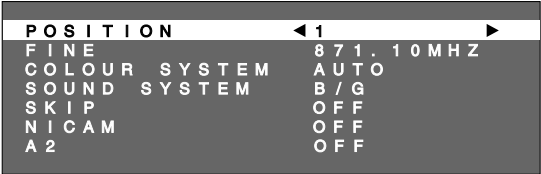
Selected item	Description
POSITION	The channel position changes to the upper or lower number.
FINE	The frequency changes to allow fine tuning.
COLOUR SYSTEM	The mode changes as follows: AUTO ↔ PAL ↔ SECAM PAL60 ↔ N443 ↔ N358
SOUND SYSTEM	The mode changes as follows: B/G ↔ I ↔ D/K ↔ M
SKIP	The mode changes as follows: ON ↔ OFF Channel numbers with a “♦ (RED)” mark on the left are set to skip. To turn off Skip, press Channel Select to select the desired channel, and then set the Skip mode on the CH SETUP (MANUAL) menu to “OFF”.
NICAM	The broadcast sound system changes as follows: ON (NICAM sound) ↔ OFF (Monaural TV sound)
A2	Stereo system changes as follows: ON (A2 sound) ↔ OFF (Monaural TV sound)

NOTE

- Switching COLOUR SYSTEM:
Set the system to Auto for normal TV reception. The Auto mode automatically detects the receiving signal system and changes the reception system of the LCD TV set. When the picture or sound is not stable, switching to an appropriate system may improve the picture or sound quality.

Channel Setting (MANUAL)

- 1 Perform steps 1 and 2 in **Channel Setting (AUTO)** to display the Setup Menu screen.
- 2 Press **▲▼** to select “CH SETUP”, and press **OK**.
- 3 Press **▲▼** to select “MANUAL”, and press **OK**.
- 4 Press **▲▼** to select the desired adjustment item.



- 5 Each time you press **◀▶**, the setting for individual items changes as shown in the table on the right.
- 6 Press **MENU** to exit.

Selecting Menu Items

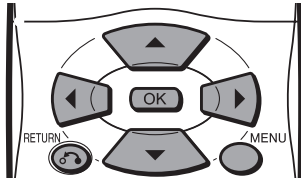
The menus can be used to adjust the various settings of your LCD TV set. Select the desired menu item by following the steps below.

See the next page for each Menu screen.

NOTE

- Settings most recently made will be saved in memory.

■ Using the remote control

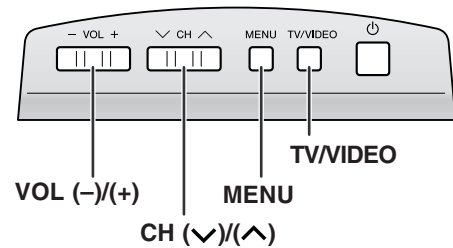


- 1 Press **MENU** to display the Menu screen.
- 2 Press **◀▶** to select the desired menu item.
 - The cursor moves left or right.
 - The cursor indicates the selected menu item.
- 3 Press **▲▼** to select the desired item, and press **◀▶** to adjust the selected item.
 - For some items (e.g. "SOUND VIA" on the "SOUND" Menu screen), press **OK** to display the setting screen.

PICTURE	SOUND	SETUP	FEATURES
CONTRAST	[50]	-	+
BRIGHTNESS	[0]	-	+
COLOUR	[0]	-	+
TINT	[0]	■	■
SHARPNESS	[0]	-	+
RESET			

- 4 Press **RETURN** to return to the previous screen or **MENU** to exit.

■ Using the control panel of the main unit



- 1 Press **MENU** to display the Menu screen.
- 2 Press **VOL (-)/(+)** to select the desired menu item.
 - The cursor moves left or right.
 - The cursor indicates the selected menu item.
- 3 Press **CH (v)/(^)** to select the desired item, and press **VOL (-)/(+)** to adjust the selected item.
 - For some items (e.g. "SOUND VIA" on the "SOUND" Menu screen), press **TV/VIDEO** to display the setting screen.

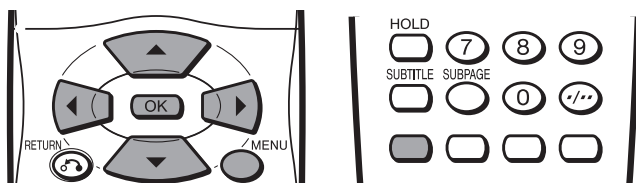
PICTURE	SOUND	SETUP	FEATURES
CONTRAST	[50]	-	+
BRIGHTNESS	[0]	-	+
COLOUR	[0]	-	+
TINT	[0]	■	■
SHARPNESS	[0]	-	+
RESET			

- 4 Press **MENU** to exit.

Useful Features

Picture Adjustments

Adjust the picture to suit your preference. See the table below for the adjustment items.



- 1 Press **MENU** to display the Menu screen.
• The PICTURE Menu screen can be displayed directly by pressing the **Red** button.

- 2 Press **◀▶** to select "PICTURE".

- 3 Press **▲▼** to select a specific adjustment item.

PICTURE	SOUND	SETUP	FEATURES
CONTRAST	[50]	-	+
BRIGHTNESS	[0]	-	+
COLOUR	[0]	-	+
TINT	[0]	-	+
SHARPNESS	[0]	-	+
RESET			

- 4 Press **◀▶** to adjust the item to your desired position.

- 5 Press **MENU** to exit.

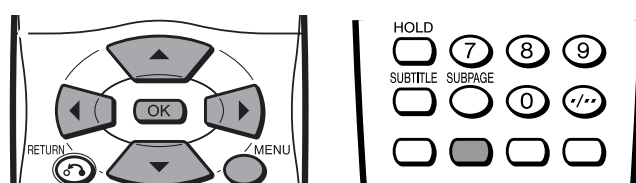
Selected item	◀ button	▶ button
CONTRAST	For less contrast	For more contrast
BRIGHTNESS	For less brightness	For more brightness
COLOUR	For less colour intensity	For more colour intensity
TINT	Skin tones become purplish.	Skin tones become greenish.
SHARPNESS	For less sharpness	For more sharpness

NOTE

- When resetting all adjustment items to factory preset values, perform the following procedure.
 - 1 Press **▲▼** to select "RESET", and press **OK**.
 - 2 Press **▲▼** to select "YES", and press **OK**.

Sound Adjustments

Adjust the sound quality and volume to suit your preference. See the table below for the adjustment items.



- 1 Press **MENU** to display the Menu screen.
• The SOUND Menu screen can be displayed directly by pressing the **Green** button.

- 2 Press **◀▶** to select "SOUND".

- 3 Press **▲▼** to select a specific adjustment item.

SOUND	SETUP	FEATURES
SOUND VIA	[TV]	
TREBLE	[0]	-
BASS	[0]	-
BALANCE	[0]	L
SOUND WIDE		
RESET		

- 4 Press **◀▶** to adjust the item to your desired position.

- 5 Press **MENU** to exit.

Selected item	◀ button	▶ button
TREBLE*	For weaker treble	For stronger treble
BASS*	For weaker bass	For stronger bass
BALANCE*	Decrease audio from the right speaker.	Decrease audio from the left speaker.

* These items cannot be adjusted when "SOUND VIA" is set to "HIFI".

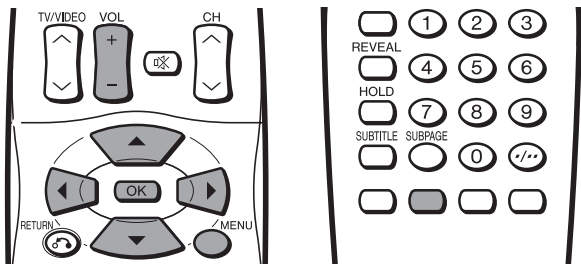
NOTE

- When resetting all adjustment items to factory preset values, perform the following procedure.
 - 1 Press **▲▼** to select "RESET", and press **OK**.
 - 2 Press **▲▼** to select "YES", and press **OK**.

Useful Features (Continued)

Sound Mode Settings

You can make various sound mode settings.



- 1 Press **MENU** to display the Menu screen.
 - The **SOUND** Menu screen can be displayed directly by pressing the **Green** button.
- 2 Press **◀▶** to select “**SOUND**”.
- 3 Press **▲▼** to select the desired item, and press **OK**.
- 4 Press **▲▼** to select the sound mode, and press **OK**.
- 5 Press **MENU** to exit.

Selected item	Choice
SOUND VIA	TV ↔ HIFI
SOUND WIDE	ON (For increasing the spread of the sound) ↔ OFF

NOTE

For the “**SOUND VIA**” setting

- When setting “**SOUND VIA**” to “**HIFI**” in the Sound Menu screen, the sound from the built-in speakers will be turned off. To exit this mode, switch “**SOUND VIA**” from “**HIFI**” to “**TV**”.
- Pressing **VOL (+)/(-)** will display the volume indicator shown below. You can adjust the volume by pressing **VOL (+)/(-)**.

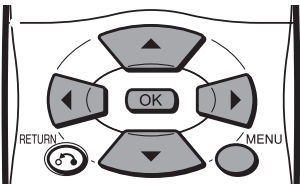


For the “**SOUND WIDE**” setting

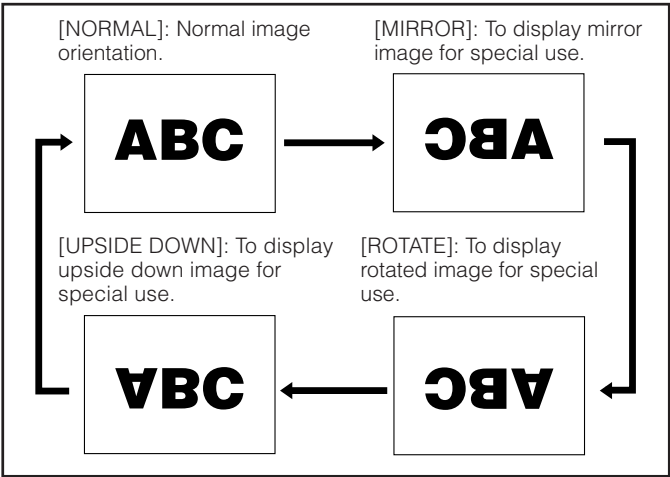
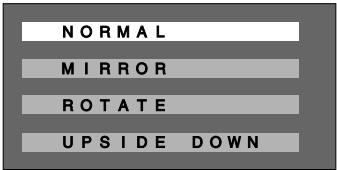
- “**SOUND WIDE**” cannot be set when “**SOUND VIA**” is set to “**HIFI**”.

DISPLAY MODE

You can set the orientation of the picture.

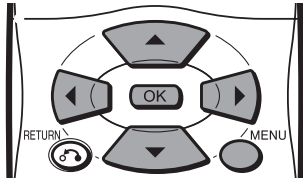


- 1 Press **MENU** to display the Menu screen.
- 2 Press **◀▶** to select “**SETUP**”.
- 3 Press **▲▼** to select “**DISPLAY MODE**”, and press **OK**.
- 4 Press **▲▼** to select the desired mode, and press **OK**.
- 5 Press **MENU** to exit.



LANGUAGE

The language for the on-screen display can be selected from English, Chinese and Arabic.



- 1 Press **MENU** to display the Menu screen.
- 2 Press **◀▶** to select "SETUP".
- 3 Press **▲▼** to select "LANGUAGE", and press **OK**.
- 4 Press **▲▼** to select the desired language, and press **OK**.



- 5 Press **MENU** to exit.

TELETEXT LANGUAGE

The language for the Teletext can be selected.

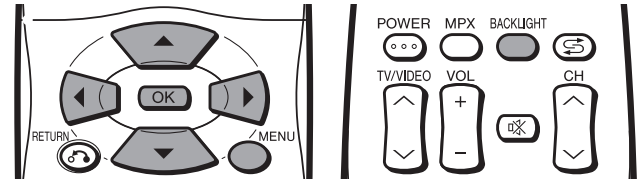
- 1 Perform steps 1 and 2 in **LANGUAGE** to display the SETUP Menu screen.
- 2 Press **▲▼** to select "TELETEXT LANGUAGE", and press **OK**.
- 3 Press **▲▼** to select the desired language, and press **OK**.



- 4 Press **MENU** to exit.

BACKLIGHT

You can make the setting for the brightness of the screen.



- 1 Press **MENU** to display the Menu screen.
- 2 Press **◀▶** to select "FEATURES".
- 3 Press **▲▼** to select "BACKLIGHT", and press **OK**.
- 4 Press **▲▼** to select the desired mode, and press **OK**.
- 5 Press **MENU** to exit.

Selected item	Factory setting	Choice
BACKLIGHT	[BRIGHT] Maximum brightness	[AUTO (OPC*)] Screen brightness is adjusted according to the ambient light of the room. [NORMAL] Suitable for viewing in a well-lit area. Saves energy. [DARK] Sufficiently bright when viewing in a dim area.

* OPC is an abbreviation of Optical Picture Control.

NOTE

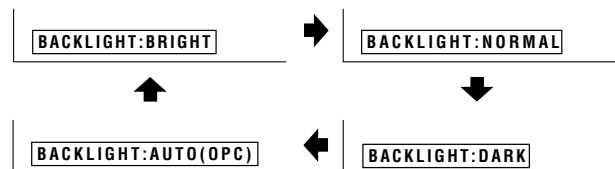
- The Backlight setting can be directly selected using the remote control (see below).

Directly setting the Backlight

You can change the Backlight setting directly.

Press **BACKLIGHT** to select the desired mode.

- Each time you press **BACKLIGHT**, the mode changes as follows.



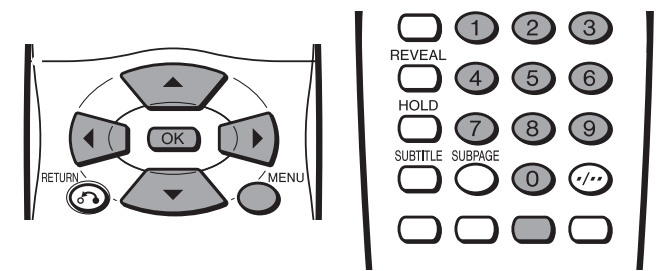
NOTE

- See the table above for details on each brightness setting.
- When set to "AUTO (OPC)", make sure that no object obstructs the OPC sensor, which could affect its ability to sense surrounding light.

Useful Features (Continued)

SLEEP TIMER

You can set "SLEEP TIMER" to automatically turn off the LCD TV set.



- 1 Press **MENU** to display the Menu screen.
 - The SLEEP TIMER Menu screen can be displayed directly by pressing **Yellow**.
- 2 Press **Left/Right** to select "FEATURES".
- 3 Press **Up/Down** to select "SLEEP TIMER", and press **OK**.
- 4 Press **Up/Down** to select the desired mode, and press **OK**.



- 5 Press **MENU** to exit.

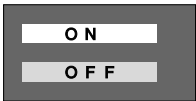
NOTE

- When not using the LCD TV set for a long period of time, turn off the main power.

AUTO POWER OFF

You can set the power to automatically turn off if there is no signal for 5 minutes.

- 1 Perform steps 1 and 2 in **SLEEP TIMER** to display the FEATURES Menu screen.
- 2 Press **Up/Down** to select "AUTO POWER OFF", and press **OK**.
- 3 Press **Up/Down** to select "ON", and press **OK**.



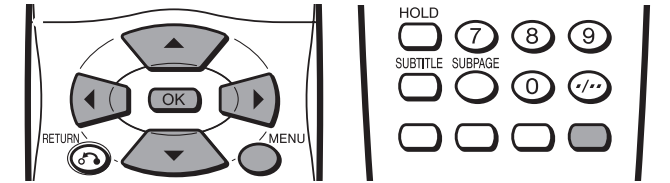
- 4 Press **MENU** to exit.

NOTE

- "AUTO POWER OFF" is set to "OFF" at the factory setting.

ON-SCREEN DISPLAY

You can adjust various settings for on-screen displays.



- 1 Perform steps 1 and 2 in **SLEEP TIMER** to display the FEATURES Menu screen.
- 2 Press **Up/Down** to select "ON SCREEN DISP.", and press **OK**.
- 3 Press **Up/Down** to select the desired item.
- 4 Each time you press **Left/Right**, the setting for individual items changes as shown in the table below.
- 5 Press **MENU** to exit.

POSITION		◀ BOTTOM ▶
SOUND	INFO.	YES
SLEEP	TIME	NO

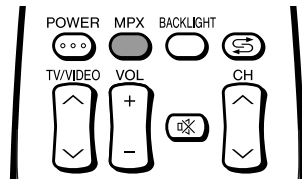
Selected item	Choice	Description
POSITION	BOTTOM ↔ TOP	To select the position of the on-screen display.
SOUND INFO.	NO ↔ YES	To select whether or not sound information is to be displayed, when a channel has been selected.
SLEEP TIME	NO ↔ YES	To select whether or not sleep time information is to be displayed on the on-screen display.

NOTE

- The status display appears by pressing the **Cyan** button.

NICAM Broadcast Selection

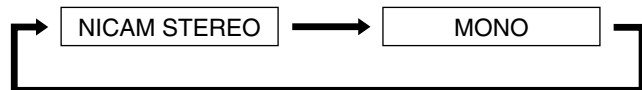
To let you enjoy NICAM broadcasting, this LCD TV set receives NICAM stereo system, bilingual and monaural broadcasts.



Stereo

The LCD TV set is receiving a stereo broadcast.

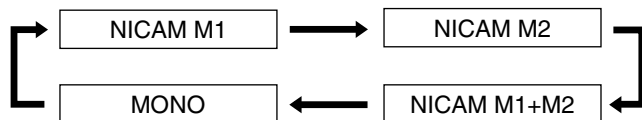
- Each time you press **MPX**, the mode changes between "NICAM STEREO" and "MONO".
- When "MONO" is selected, the TV sound is output monaurally.



Bilingual

The LCD TV set is receiving a bilingual broadcast.

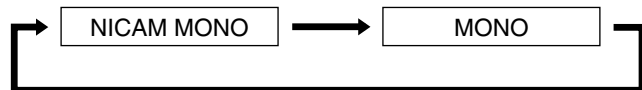
- Each time you press **MPX**, the mode changes as follows:



Monaural

The LCD TV set is receiving a monaural broadcast.

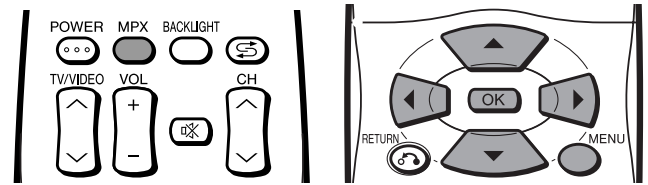
- Each time you press **MPX**, the mode changes between "NICAM MONO" and "MONO".



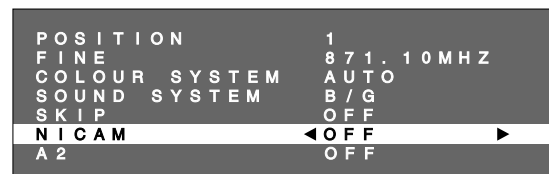
NOTE

- If approximately 3 seconds pass without a button being pressed, the mode setting is automatically terminated and the LCD TV set returns to the normal mode.
- The setting can be selected individually for each channel number.

If the sound quality is poor due to a weak signal or other problems during NICAM broadcast reception, set the "OFF" position of the NICAM to change the TV sound to monaural.

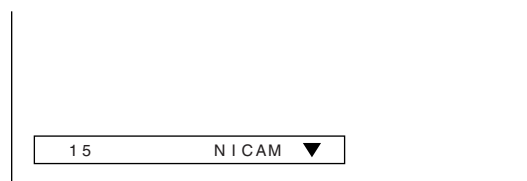


- Press **MENU** to display the Menu screen.
- Press **◀▶** to select "SETUP".
- Press **▲▼** to select "CH SETUP", and press **OK**.
- Press **▲▼** to select "MANUAL", and press **OK**.
- Press **▲▼** to select "NICAM", and press **◀▶** to select "OFF".



- When the NICAM sound is set to the "OFF" position, the TV sound is output in monaural.

- Press **MENU** to exit.
(When the "OFF" position is selected)

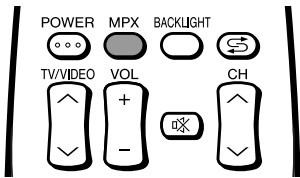


NOTE

- When the NICAM sound is set to the "OFF" position, **MPX** cannot be used to change the audio mode between stereo and bilingual setting.

A2 Stereo Broadcast Selection

To let you enjoy A2 stereo broadcasting, this LCD TV set receives A2 stereo system and bilingual broadcasts.



Stereo

The LCD TV set is receiving a stereo broadcast.

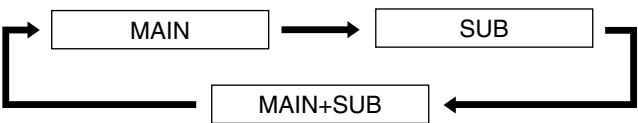
- Each time you press **MPX**, the mode changes between "STEREO" and "MONO".
- When "MONO" is selected, the TV sound is output monaurally.



Bilingual

The LCD TV set is receiving a bilingual broadcast.

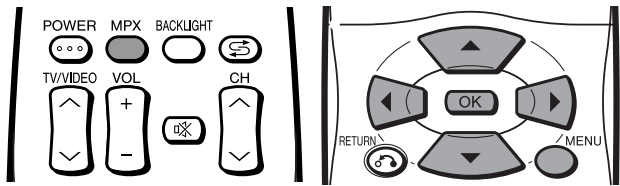
- Each time you press **MPX**, the mode changes as follows:



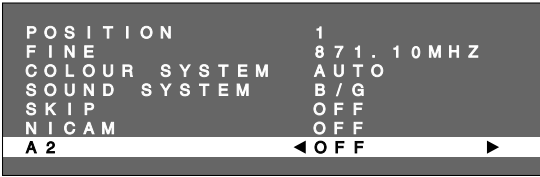
NOTE

- If approximately 3 seconds pass without a button being pressed, the mode setting is automatically terminated and the LCD TV set returns to the normal mode.
- The setting can be selected individually for each channel number.

If the sound quality is poor due to a weak signal or other problems during A2 stereo broadcast reception, set the "OFF" position of the A2 to change the TV sound to monaural.

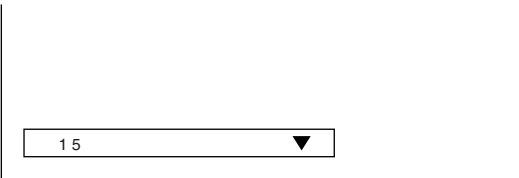


- 1 Press **MENU** to display the Menu screen.
- 2 Press **◀▶** to select "SETUP".
- 3 Press **▲▼** to select "CH SETUP", and press **OK**.
- 4 Press **▲▼** to select "MANUAL", and press **OK**.
- 5 Press **▲▼** to select "A2", and press **◀▶** to select "OFF".



- When the A2 sound is set to the "OFF" position, the TV sound is output in monaural.

- 6 Press **MENU** to exit.
(When the "OFF" position is selected)



NOTE

- When the A2 sound is set to the "OFF" position, **MPX** cannot be used to change the audio mode between stereo and bilingual setting.

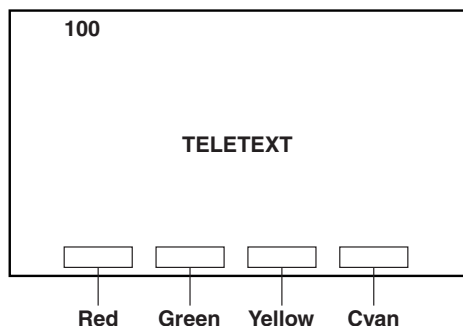
Teletext

■ What is Teletext?

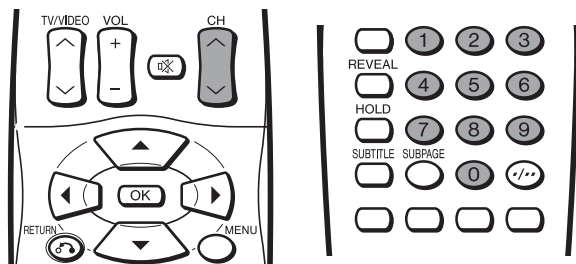
Teletext is an information service organised like a magazine, which is provided by some TV stations in addition to regular television broadcasting. Your LCD TV set receives special Teletext signals broadcast by a TV station, processes the information and displays it graphically on the screen. News, weather and sports information, stock exchange prices, programme reviews and closed captioning for people hard of hearing are among the many services available through Teletext.

■ Teletext mode

Teletext is activated with **TEXT** on the remote control and is also closed with it. The LCD TV set can be controlled in Teletext mode directly by inputting commands with the remote control and indirectly through the on-screen display (menu system).



■ When viewing the Teletext information

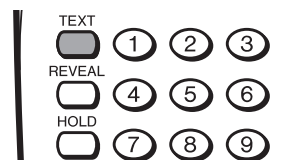


- Press **CH** (▲) to increase the page number.
- Press **CH** (▼) to decrease the page number.
- Directly select any page from 100 to 899 by using 0 to 9.

■ Operating instructions in Teletext mode

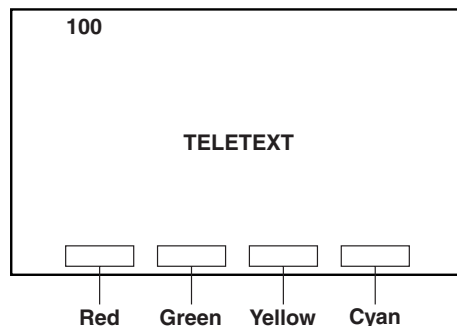
- The FLOF system for Teletext is transmitted in Singapore currently.
- The TOP system for Teletext is transmitted in Australia currently.

[1] Turning on and off Teletext mode



- 1 Select a TV channel that is broadcasting the Teletext programme.

- 2 Press **TEXT** to display the Teletext screen.
 - To turn off the Teletext mode, press **TEXT** again.

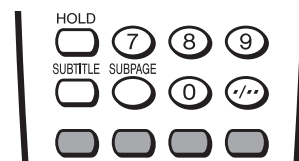


NOTE

- For selecting the language for the Teletext screen, see "TELETEXT LANGUAGE" on page 17.

[2] Using the TOP line

When TOP Teletext is being broadcast, a control line and TOP line can be displayed on the screen. The TOP line involves the operating instructions associated with all of the **Coloured buttons** if TOP text is transmitted.



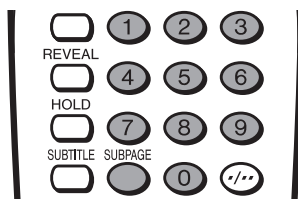
Press the **Coloured buttons** to operate the Teletext screen.

- Press **Red** to display the previous page and **Green** to display the next page. **Yellow** and **Cyan** are as indicated on the TOP line.

Teletext (Continued)

[3] Changing subpages

If a page has been selected from among several subpages, you can display a control line which contains the subpage numbers.



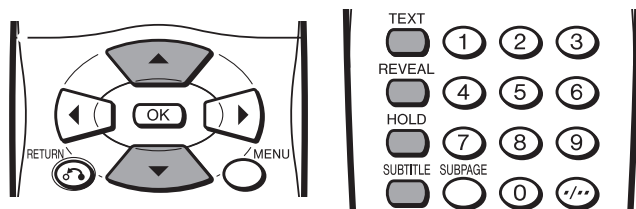
- 1 Press **SUBPAGE**.



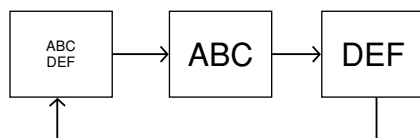
- 2 Press **Channel Select** to select the desired subpage number.

- 3 Press **SUBPAGE** to turn off the control line.

[4] Useful Features for Teletext



- **HOLD** on the remote control can be used to hold the current teletext page.
Press the button again to cancel the Hold mode.
- **▲/▼** can be used to zoom the current Teletext page as shown below.
 - The screen is displayed in each mode each time **▲/▼** is pressed.



- **SUBTITLE** can be used to quickly activate subtitles.
 - Press **TEXT** to deactivate subtitles.
- **REVEAL** can be used to display hidden information such as solutions to riddles and puzzles.
Press the button again to hide the information.

Connecting External Devices

You can enjoy picture and sound by connecting external devices, such as a VCR or a home video game system, to the terminals located on the rear of the LCD TV set.

When connecting an external device, turn off the main power of the LCD TV set first to prevent any possible damage.

Example of external devices that can be connected

To INPUT1 terminal (COMPONENT)

<Example>

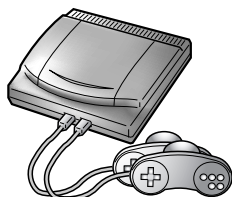
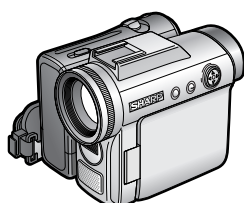
- DVD player, etc



To INPUT2 terminal

<Example>

- Camcorder
- Home video game system
- VCR

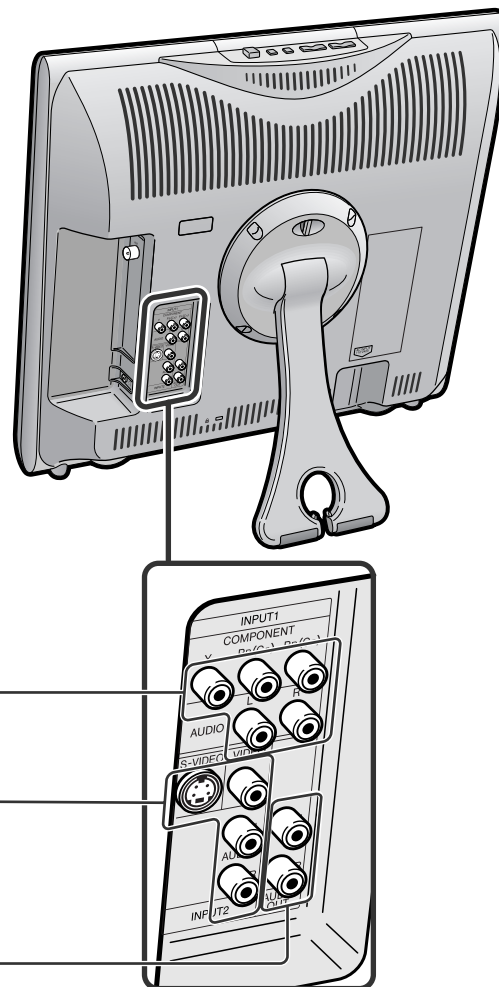


* If the external device has an S-VIDEO terminal, S-VIDEO connection is recommended.

To AUDIO OUT terminal

<Example>

- Audio amplifier

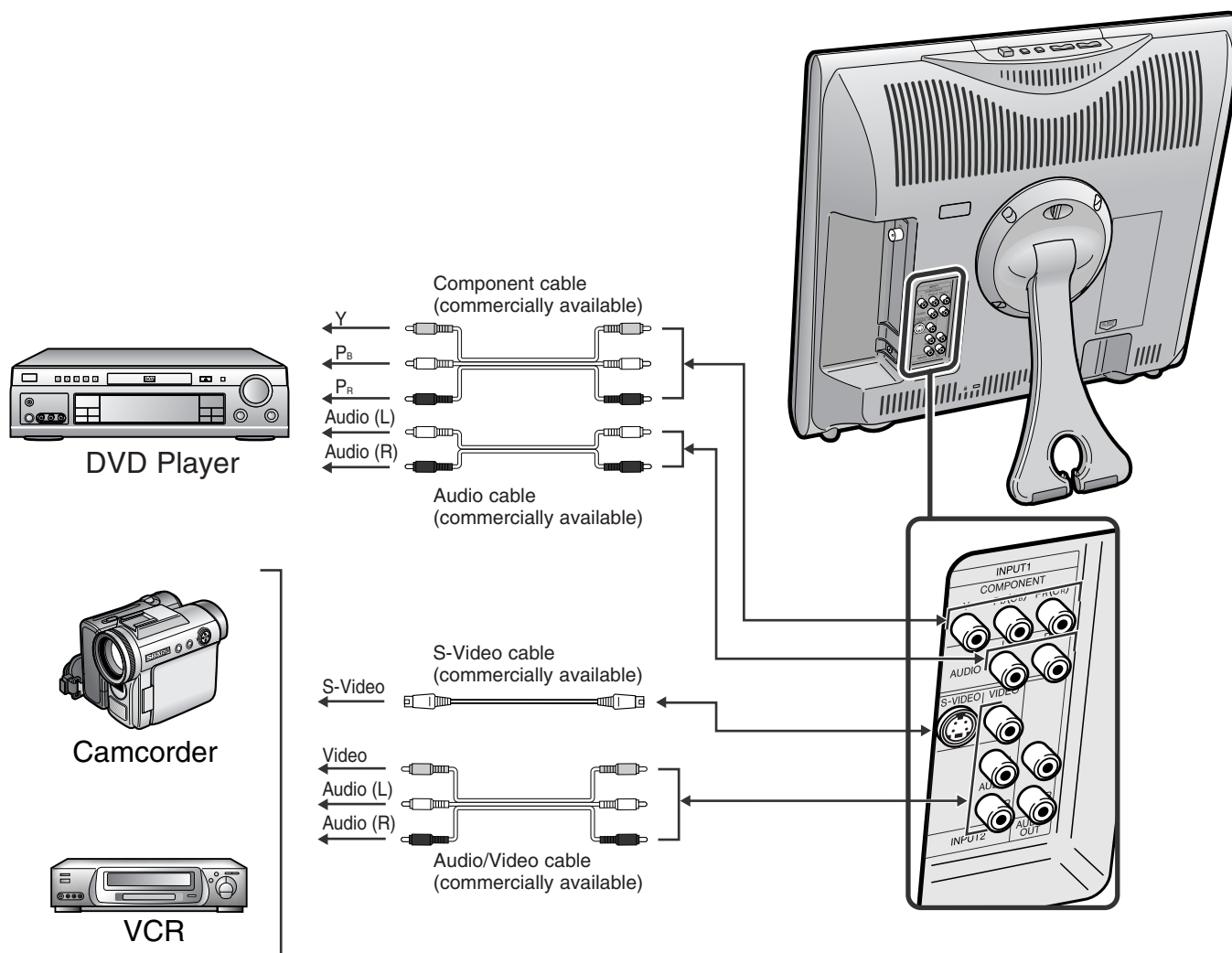


NOTE

- PC connection is not possible.
- For the cable, use a commercially available audio/video cable.
- Only connect audio/video signals to INPUT1 and INPUT2 terminals. Connecting other signals may result in a malfunction.
- The VIDEO input terminal and the S-VIDEO input terminal on the INPUT2 are shared connections with priority given to the S-VIDEO input terminal. If both terminals are connected, the video signals from the S-VIDEO input terminal are selected for the INPUT2 mode. When viewing video from the VIDEO input terminal, do not connect anything to the S-VIDEO input terminal.
- For more information about external device connections, see the operation manuals of your external devices.

Connecting External Devices (Continued)

Connecting to the INPUT1/INPUT2 terminals



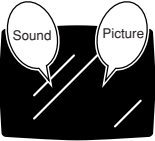
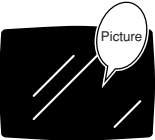

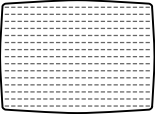

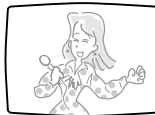

NOTE

- If your VCR (or other external devices) has an S-Video terminal, S-VIDEO connection is recommended. (Use an S-Video cable.)
- When you connect external devices to both S-VIDEO and VIDEO terminals (and if you select INPUT2), you can only view pictures from the S-VIDEO terminal.
- You cannot view multiple or synthesised pictures by connecting two or more external devices. When connecting an external device, make sure to connect the video and audio cable to the corresponding terminals.
- Only when 480I/576I/480P signal is received through the INPUT1 terminals, picture can be displayed.
* This LCD TV set does not support HD signal (1080I/720P/576P), even though it may display it in some circumstances.
- When connecting the DVD player, VCR or other external devices to each input terminal, the screen image will sometimes disappear, or there will be no colour when turning on or off the power of the external device or changing the signal of the DVD player from 480I to 480P, or vice versa. This is not malfunction. In this case, press **TV/VIDEO** to select the other input mode and press **TV/VIDEO** again to select the desired input mode.

Troubleshooting

Before calling for repair services, make the following checks for possible remedies to the symptoms encountered.

LCD TV set

Problem	Check item	Reference page
 <p>There is no picture or sound.</p>	<ul style="list-style-type: none"> Reception other than that of broadcasting stations could be the problem. Make sure the input mode is set to TV. Make sure the main power switch of the LCD TV set is on. 	<p>–</p> <p>10 10</p>
 <p>There is no picture. There is no picture from INPUT2 .</p>	<ul style="list-style-type: none"> Make sure the Picture adjustment is properly adjusted. The fluorescent lamp may have reached the end of its service life. Make sure the S-VIDEO terminal has nothing connected. 	<p>15 –</p> <p>8, 24</p>
 <p>There is no sound.</p>	<ul style="list-style-type: none"> Make sure the volume is not set to minimum. Make sure the sound is not set to mute. 	<p>11 11</p>
 <p>There is no picture or sound, just noise.</p>	<ul style="list-style-type: none"> Make sure the antenna cable is properly connected. Bad reception could be the problem. 	<p>5 –</p>
 <p>The picture is not clear.</p>	<ul style="list-style-type: none"> Make sure the antenna cable is properly connected. Bad reception could be the problem. 	<p>5 –</p>
 <p>The picture is too light or improperly tinted.</p>	<ul style="list-style-type: none"> Check the colour adjustment. 	<p>15</p>
 <p>The picture is too dark.</p>	<ul style="list-style-type: none"> Check if "BACKLIGHT" is set to "DARK". Check "CONTRAST". The fluorescent lamp may have reached the end of its service life. 	<p>17 15 –</p>
Remote control does not work.	<ul style="list-style-type: none"> Check if batteries in the remote control have sufficient power. Make sure the remote sensor window is not under strong lighting. 	<p>4 4</p>
Unit cannot be operated.	<ul style="list-style-type: none"> External influences such as lightning, static electricity, etc., may cause improper operation. In this case, operate the unit after turning the power off, or unplugging the AC cord and re-plugging it in 1 or 2 minutes. 	<p>–</p>

When a problem has occurred such as no picture or no sound, either turn off the main power and then turn it back on again, or unplug the AC cord and then plug it in again.

■ Cautions regarding use in high and low temperature environments

- When the unit is used in a low temperature space (e.g. room, office), the picture may leave trails or appear slightly delayed. This is not a malfunction, and the unit will recover when the temperature returns to normal.
- Do not leave the unit in a hot or cold location. Also, do not leave the unit in a location exposed to direct sunlight or near a heater, as this may cause the cabinet to deform and the LCD panel to malfunction.
(Storage temperature: –20°C to +60°C)

Troubleshooting (Continued)

Antenna

Problem	Check item
The picture is not sharp. The picture shakes.	<ul style="list-style-type: none"> The reception may be weak. The quality of the broadcast may also be bad. Make sure the antenna is facing the correct direction. Make sure the outside antenna has not been disconnected.
The picture has ghosts.	<ul style="list-style-type: none"> Make sure the antenna is facing the correct direction. Broadcast waves may be reflected from adjacent mountains or buildings.
The picture is spotted.	<ul style="list-style-type: none"> There may be interference from automobiles, trains, high-voltage lines, neon lights, etc. There may be interference between the antenna cable and power cable. Try positioning them further apart.
There are stripes on the screen or colours fade.	<ul style="list-style-type: none"> Is the unit receiving interference from other devices? Transmission antennas of radio broadcasting stations and transmission antennas of amateur radios and mobile phones may also cause interference. Use the unit as far apart as possible from devices that may cause possible interference.

Specifications

Items		Model	LC-15SH1M/LC-15SH1X	LC-20SH1M/LC-20SH1X
LCD panel			15" (38 cm) Advanced Super View & BLACK TFT LCD	20" (50 cm) Advanced Super View & BLACK TFT LCD
Number of dots			921,600 dots	
Video colour system			World multi system	
TV	TV-Standard (CCIR)		PAL: B/G, I, D/K NTSC: M SECAM: B/G, D/K	
	TV-Tuning System		Auto preset tuning	
	STEREO/BILINGUAL		NICAM-B/G, I, D/K, A2 stereo-B/G	
	AUTO PRESET		Yes	
	CATV		S1~S41 ch. Hyper Band	
4 LINE DIGITAL COMB FILTER			Yes	
Brightness			430 cd/m ²	
Lamp life			60,000 hours*	
Viewing angles			H: 170° V: 170°	
Audio amplifier			2.1 W × 2	
Speakers			11 cm × 4 cm 2 pcs.	
Terminals	INPUT1		Y, P _B (C _B), P _R (C _R) / Audio (L/R)	
	INPUT2		Composite Video, S-Video, Audio (L/R)	
	AUDIO OUT		Audio (L/R)	
	Headphones		3.5 mm ø jack (side)	
OSD language			English/Chinese/Arabic	
Power requirement			AC 110 V–240 V, 50/60 Hz	
Power consumption			46 W (1.0 W Standby), AC 230 V	64 W (1.0 W Standby), AC 230 V
Weight (approx.)			4.3 kg, w/o accessories	6.4 kg, w/o accessories

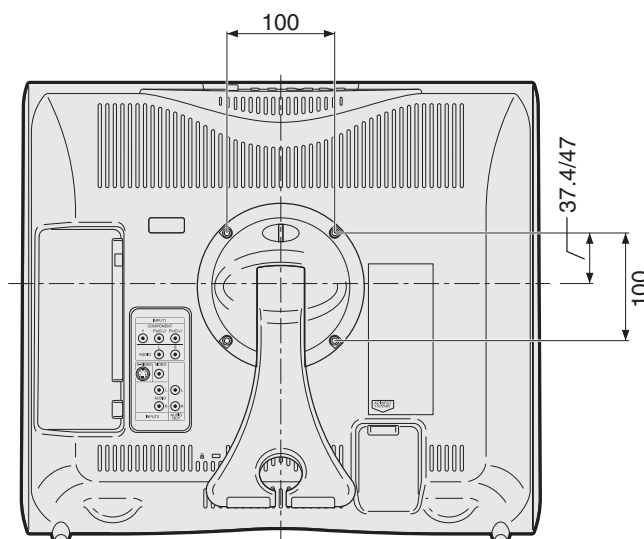
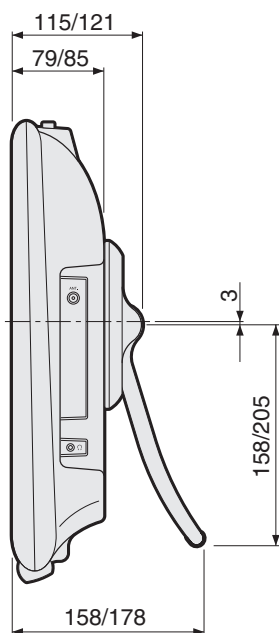
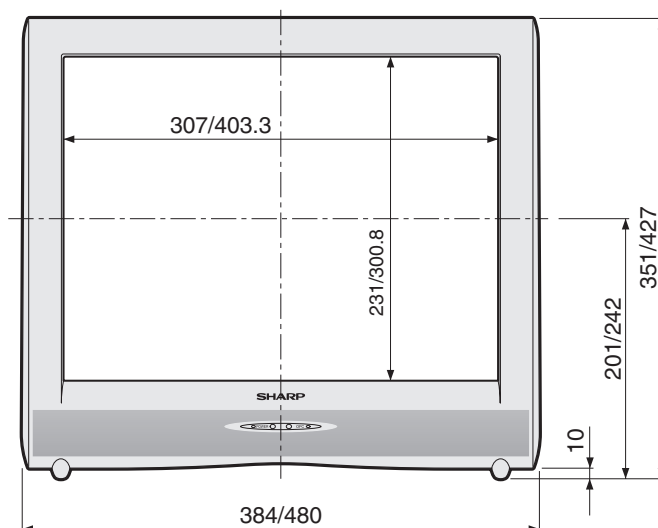
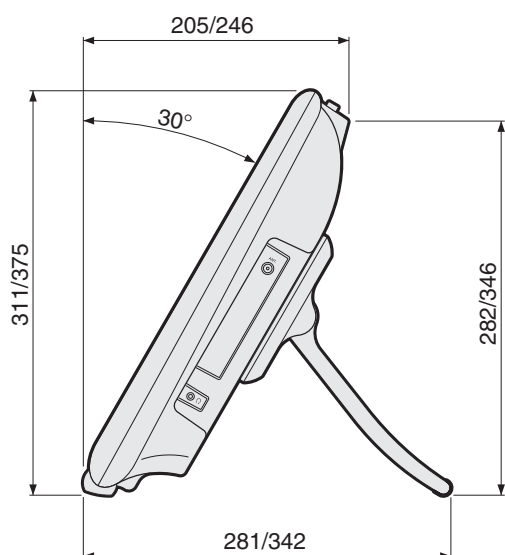
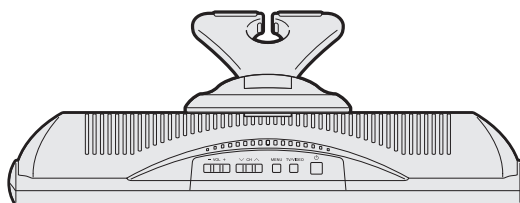
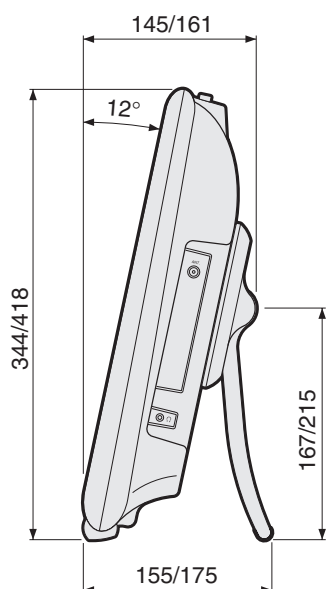
* The typical period of time after which the lamp's power output will have decreased by about half, given that the LCD TV set is used continuously in a 25°C room under standard lighting and brightness conditions.

■ As a part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for the LCD TV set improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

Dimensional Drawings

LC-15SH1M/LC-15SH1X / LC-20SH1M/LC-20SH1X

Unit: mm



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